AU, COUNTY	OF POLI	CE DEPARTM	MENT		
INUED					
NCMC	WNTL566	WNTN298	WNTP285	WNTP289	SYOSSE
THOMAS	WATERT	WHI453	WHI456	WHI459	WHI464
ONAL MEGEM	TNOMED DAN	v			
		V			
MMEAJJZ	MMEX333				
SUBSIDIARY	(WNBC-TV.	INC.)			
RXONLY	WLE370	WLE371	WLE373	WLE374	WLE375
	GITAL DIST	RIBUTION,	INC.		
					WLL305
MTT306	WLM601	WLM602	WML249	WML250	
ENGLAND MI	CDOMPARE IN	IC (STOPE	D١		
		C (STORE)	K)		
JERSEY BEI	L TELEPHON	E COMPANY			
ELIZAB	ELIZER	HACKE2	HACKEN	KEA69	KEARNY
KEK98					NEWARK
PARAMU	ROCHPK	TEMP10			TOTOWA
	TRENT4	WAINE			WHIPP
WLM594	WLM595	WLM/80	WLR525	WPY24	
TEDSEV INT	PEDCAMDIIC N	יבישטטע די	NC		
				RXONLY	SCOTT
STEVEN	TUCKER			MIGNET	00011
TILN	VTMLN	RXONLY	WLO382		
VODV CEN	77 AR ARR				
				WNEDOOE	WNEP906
		MNEP903	WNEP904	WNEP9US	MNEP906
MNIGETE	WW16512				
YORK CELL	ULAR GEOGR	APHIC SRVC	AREA		
				LAIGHT	SUNNYS
VARICK	WLU805	WOBURN			
		Y			
MTT8 \ 6	WLT8.				
VORK CTTV	HEAT.TH A	HOSDITAL C	CORP		
				WBM571	WCE302
WCE303	,				325 36
YORK CITY	POLICE DE	PARTMENT			
	TINUED NCMC THOMAS IONAL WESTM WNEX352 SUBSIDIARY RXONLY ENGLAND DI CANDW WLL306 ENGLAND MI WNTQ567 JERSEY BEI ELIZAB KEK98 PARAMU TRENT2 WLM594 JERSEY INT 7 GEIG STEVEN JERSEY PUI NJIT YORK STAT WNEP901 WNTQ212 YORK CELLI ARLING VARICK YORK CITY WNEV610 WCE303	NCMC WNTL566 THOMAS WATERT CONAL WESTMINSTER BAN WNEX352 WNEX353 SUBSIDIARY (WNBC-TV, RXONLY WLE370 ENGLAND DIGITAL DIST CANDW PRUDEN WLL306 WLM601 ENGLAND MICROWAVE IN WNTQ567 WNTQ568 JERSEY BELL TELEPHON ELIZAB ELIZER KEK98 KEL24 PARAMU ROCHPK TRENT2 TRENT4 WLM594 WLM595 JERSEY INTERCAMPUS NAME TO THE STEVEN TUCKER JERSEY PUBLIC BROADE NJIT NJMTV YORK STATE OF OFFE WNEP901 WNEP902 WNTQ212 WNTQ213 YORK CELLULAR GEOGRA ARLING GARDEN VARICK WLU805 YORK CGSA FOR ALBAN WLL876 WLL877 YORK CITY HEALTH & WNEV610 WNEV610 WNEV610 WNEV616	NCMC WNTL566 WNTN298 THOMAS WATERT WH1453 CONAL WESTMINSTER BANK WNEX352 WNEX353 SUBSIDIARY (WNBC-TV, INC.) RXONLY WLE370 WLE371 ENGLAND DIGITAL DISTRIBUTION, CANDW PRUDEN WLK709 WLL306 WLM601 WLM602 ENGLAND MICROWAVE INC (STORE) WNTQ567 WNTQ568 JERSEY BELL TELEPHONE COMPANY ELIZAB ELIZER HACKE2 KEK98 KEL24 KYS29 PARAMU ROCHPK TEMP10 TRENT2 TRENT4 WAYNE WLM594 WLM595 WLM780 JERSEY INTERCAMPUS NETWORK, I 7 GEIG HERITA MONTCL STEVEN TUCKER JERSEY PUBLIC BROADCASTING AU NJIT NJMTV RXONLY YORK STATE OF OFFICE GENERA WNEP901 WNEP902 WNEP903 WNTQ212 WNTQ213 YORK CELLULAR GEOGRAPHIC SRVC ARLING GARDEN GLEN O VARICK WLU805 WOBURN YORK CGSA FOR ALBANY WLL876 WLL877 YORK CITY HEALTH & HOSPITAL O WNEV610 WNEV616 WNEV617	NCMC WNTL566 WNTN298 WNTP285 THOMAS WATERT WHI453 WHI456 CONAL WESTMINSTER BANK WNEX352 WNEX353 SUBSIDIARY (WNBC-TV, INC.) RXONLY WLE370 WLE371 WLE373 ENGLAND DIGITAL DISTRIBUTION, INC. CANDW PRUDEN WLK709 WLK711 WLL306 WLM601 WLM602 WML249 ENGLAND MICROWAVE INC (STORER) WNTQ567 WNTQ568 JERSEY BELL TELEPHONE COMPANY ELIZAB ELIZER HACKE2 HACKEN KEK98 KEL24 KYS29 LIVING PARAMU ROCHPK TEMP10 TEMP12 TRENT2 TRENT4 WAYNE WBB307 WLM594 WLM595 WLM780 WLR525 JERSEY INTERCAMPUS NETWORK, INC. 7 GEIG HERITA MONTCL RUTGER STEVEN TUCKER JERSEY PUBLIC BROADCASTING AUTHORITY NJIT NJMTV RXONLY WLO382 YORK STATE OF OFFICE GENERAL SRVCS WNEP901 WNEP902 WNEP903 WNEP904 WNTQ212 WNTQ213 YORK CELLULAR GEOGRAPHIC SRVC AREA ARLING GARDEN GLEN O JERSEY VARICK WLU805 WOBURN YORK CGSA FOR ALBANY WLL876 WLL877 YORK CITY HEALTH & HOSPITAL CORP WNEV610 WNEV616 WNEV617 WBM570 WCE303	NCMC WNTL566 WNTN298 WNTP285 WNTP289 THOMAS WATERT WH1453 WH1456 WH1459 CONAL WESTMINSTER BANK WNEX352 WNEX353 SUBSIDIARY (WNBC-TV, INC.) RXONLY WLE370 WLE371 WLE373 WLE374 ENGLAND DIGITAL DISTRIBUTION, INC. CANDW PRUDEN WLK709 WLK711 WLL304 WLL306 WLM601 WLM602 WML249 WML250 ENGLAND MICROWAVE INC (STORER) WNTQ567 WNTQ568 JERSEY BELL TELEPHONE COMPANY ELIZAB ELIZER HACKE2 HACKEN KEA69 KEK98 KEL24 KYS29 LIVING MTOLIV PARAMU ROCHPK TEMP10 TEMP12 TETERB TRENT2 TRENT4 WAYNE WBB307 WEEHAW WLM594 WLM595 WLM780 WLR525 WPY24 JERSEY INTERCAMPUS NETWORK, INC. 7 GEIG HERITA MONTCL RUTGER RXONLY STEVEN TUCKER JERSEY PUBLIC BROADCASTING AUTHORITY NJIT NJMTV RXONLY WLO382 YORK STATE OF OFFICE GENERAL SRVCS WNEP901 WNEP902 WNEP903 WNEP904 WNEP905 WNTQ212 WNTQ213 YORK CELLULAR GEOGRAPHIC SRVC AREA ARLING GARDEN GLEN O JERSEY LAIGHT VARICK WLU805 WOBURN YORK CGSA FOR ALBANY WLL876 WLL877 YORK CITY HEALTH & HOSPITAL CORP WNEV610 WNEV616 WNEV617 WBM570 WBM571 WCE303

WNEG400

WNEX236

NEW YORK STATE ASSEMBLY ONECOM SMITH

NEW YORK STATE ELECTRIC AND GAS WNEU340 WNEU341

NEW YORK STATE HOSPITAL WNET704

NEW YORK TELEPHONE

60BROA BEACO NEWBUR WCG232 WCG233 WCG234 WCG235 WCG236 WCG237 WDD41 WLK824 WLK825 WLU996

NEW YORK UNIVERSITY, TELECOM. DEP'T. 240MER 26THST 3RDAVE EASTBL

NEW YORK, CITY OF BOARD OF EDUCATION RXONLY WLE450

NORTHEASTERN PENNSYLVANIA CELLULAR TEL WLC661 WLT592 WLW378

NORTHFIELD MT HERMON SCHOOL MTHARM NORTHF

ORANGE COUNTY CELLULAR TELEPHONE CORP. WLA311 WLV941

OTSEGO COUNTY, NEW YORK WNT1976 WGY661 WH1952

PAINE-WEBBER WNES835

PHOENIX COMMUNICATIONS, INC.
20 EXC 3 EMPI CARLST EMPIRE

PORT AUTHORITY OF NEW YORK & NEW JERSEY WCE399 WPO92

PROVIDENCE JOURNAL
PROVID WARREN WARWIC

PRUDENTIAL BACHE SECURITIES INC WNES799 WNES800

PUTNAM COMPANIES

WNEW788 WNEW789 WNEW790 WNEW791

RANA INC

ANA INC

WNTG619 WNTG620

RCI NETWORK SERVICES

WHO343 WLC614

ROBERT PLAN INSURANCE CORPORATION

WNEQ882 WNEQ883

SAINT JOSEPH HOSPITAL

WNEF345

WGY592

SANDERS ASSOCIATES

LITCHF MER-15 NCA

NHO

REPEAT

SCHENECTADY COUNTY, NEW YORK/LAW ENFORCE

WHJ689

WHJ690

WHJ691

SCRIPPS HOWARD BROADCASTING CO, INC

ORIOLE USFGBL

SOUTHEASTERN PENNSYLVANIA AUTHORITY

WNES420 WEG496

SOUTHWESTERN BELL MOBILE SYSTEMS - MA

AUBURN	CALLAH	CAMBRI	NEEDHA	ROCKLA	S BOST
WEYMOU	WH0990	WH0991	WHO992	WHO993	WH0994
WH0997	WLL347	WLL564	WLL571	WLN798	WLN978
WLS759	WLS808	WLT477	WLU604	WLV734	WLW294
WML597					

SPEAR LEEDS AND KELLOGG INC WNTE523 WNTE552

SPENCER GIFTS

WHH589

WHH590

STATE STREET BANK AND TRUST COMPANY

WNEK981 WNEK982 WNES610 WNES990 WNES991 PALMER

STATE UNIVERSITY OF NEW YORK WNEW674 WNEW675

PAGE: 10 OF 11

COMSEARCH 11720 Sunrise Valley Drive Reston, Virginia 22091 (703) 620-6300

SUBURBAN CABLE TV CO INC

KINGPR NEWHOL WBM731 WHZ910

SUPERIOR CABLE TV UNIT30 UNIT90

SUSQUEHANNA CELLULAR COMM LTD PARTNERSHI WLC321 WLN992

TELEMARK NETWORKS, INC

20EXCH NEWARK WLR460 WLR461 WLR462 WMK737

TELEMEDIA COMMUNICATIONS, INC

PARKPL PARKWA PENNAV THEPHI

THE BOEING COMPANY

WNEF240 WNEF241 WNEV573 WNEV574 WNEV575

TUFTS UNIVERSITY

ADMINB EATONH WNEU811 WNEU812

URBAN CABLESYSTEMS CORPORATION

RXONLY VIRGIN

WATCH TOWER BIBLE & TRACT SOCITY OF NY WNEF888 WNEF889 WNEF890 WNEI862

WATERFRONT COMMUNICATIONS CORPORATION

15COLU CNBC GIANTS PHOENI

WCAU-TV

WCAUST WLQ391

WELCH ALLYN INC

WNEZ438 WNEZ439

WEST CORP COMMUNICATIONS, INC.

WNTP962 WNTP963 PENNSL WINDSO

WEST JERSEY HEALTH SYSTEM

WNTM900 WNTM902 WNTM903 WNTM904

WESTCHESTER, COUNTY OF WNEE395 WNEZ897

WNEE395 WNEZ897 RADIO WATER WESTCH

WHYY, INC.

LIBERT MICRON WNEQ791 WNTC378 RXONLY

WILCO ELECTRONIC SYSTEMS, INC

HARRIS IROQUO WNTQ955 QUEENL RITTEN SOUTHW

WILCO ELECTRONIC SYSTEMS, INC CONTINUED WILSON

WXTV-TV WNTJ260 RXONLY

RESPECTFULLY SUBMITTED, COMSEARCH

MICHAEL R. ROTH

michael RRott

ENGINEER

TRANSMISSION PLANNING SERVICES

ATTACHMENT F

PEPPER & CORAZZINI

ATTORNEYS AT LAW

200 MONTGOMERY BUILDING 1776 K STREET, NORTHWEST WASHINGTON, D. C. 20006

(202) 296-0600



GREGG P. SKALL E-THEODORE MALLYCK OF COUNSEL

FREDERICK W. FORD

TELECOPIER (202). 296-5572

May 21, 1993

Federal Communications Commission Microwave Service P.O. Box 358250 Pittsburgh, PA 15251-5250

Re: Form 402

Call Sign: WNTP-569 Location: River Tower

Dear Sir or Madame:

VINCENT A PEPPER

PETER GUTMANN

JOHN F. GARZIGLIA

NEAL J.FRIEDMAH ELLEN S. MANDELL

HOWARD J. BARR

LOUISE CYBULSKI #

JENNIFER L. RICHTER &

ROBERT F. CORAZZINI

On behalf of Liberty Cable Co., Inc., there are transmitted herewith an original and one copy, clearly designated "copy", of an Application For Authorization in the Private Operational Fixed Microwave Radio Service. The Application seeks to modify the authorization for WNTP-569, an 18 GHz station located at River Tower, 420 East 54th Street in New York. The path from River Tower to 345 E. 52nd street will be modified by adding a passive repeater at that receive point, which will repeat the signal to a building located at 333 E. 55th Street.

Also enclosed is a check in the amount of \$155.00 as payment of the required filing fee.

Should there by any questions, kindly communicate directly with the undersigned.

Yours truly,

ennifer I. Pichter

Counsel for Liberty Cable

co., Inc.

Enclosure

UNITED STATES" AMER' LA FEDERAL COMMUNICATIONS COMMISSION LECTTYSBURG, PA 17326

APPLICATION FOR STATION AUTHORIZATION IN THE PRIVATE OPERATIONAL FIXED MICROWAVE RADIO SERVICE



	FOR COMMISSION USE ONLY														
FILE N	IUMBER:			34172				TO ASB:			NO .				
		FOR APPLICA	NT: Use FCC	Form 402 Inst						for reference	in comp	pleting form			
				SECT	ION I-IDENTI	FICATIO	ON I	NFORMATION	1						
1. Lil	name of berty	APPLICANT: Cable Co	o., Inc	: .		3	3. (WNIP-569		pplication re	fers to a	n existing Pa	art 94 st	ation)	
			-	, state, ZIP coo	ie)	4		LICENSEE IDE					usiy ass	igned	
	215 East 95th Street New York, NY 10128			5		NAME OF PER ennifer I					APPLICA	ATION:			
		e if you are a d em 2, IS NOT		94 licensee and on file.	d your mailing	, [TELEPHONE (202) 29	NU	MBER OF T					
	TYPE OF A	PPLICANT: [INDIVIDU	ATION GO	SOCIATION VERNMENTA TITY	,		CLASS OF ST	ΑT			5(a)(1)	LE SEC	TION	
9A.	PURPOSE OF APPLICATION: NEW STATION MODIFICATION MODIFICATION SIGNMENT OF OTHER AUTHORIZATION (SPECIFY) (SEE 9B & 9C)														
9B.	PATH	ACTION					OL	D VALUE OF	KE	Y ITEMS CHA	NGED				
	Α	⊠ AD		CHANGE	O DELET		20		30		31		32		
	В	☐ AD		CHANGE	☐ DELET		20		30		31		32		
	С	□ AD		CHANGE	DELET		20		30		31		32		
	D	☐ AD		CHANGE	O DELET		20		30		31		32		
	E	□ AD		CHANGE	DELET	E	20		30		31		32		
9C.	DESCRIBE	ANY OTHER	R CHANGES:												
10	WILL THE	S SYSTEM BE	E USED TO	PROVIDE A C	OMMUNICAT	IONS F	PRIV	ATE CARRIES		FRVICE TO	OTHERS	;?	☐ YES	<u> </u>	NO
	***************************************	<u> </u>			ECTION II—AI					Elivioe 10	O TTTETTE	<u></u>			
11.	LOCATION	N OF TRANSA	AITTING AN	TENNA STRU	CTURE										
				pecific indicat					Т	B. CITY:		·······			
				liver Towe					- 1	New Yo					
	COUNTY	· GER	<u></u>	D. STATE.	E. C001			(Degrees, M)-45-20	lini	utes. Second		E: 73-57	-72		w
12A.			E MOUNTED	ON AN EXIST					AN:	SWER ITEMS	12B, C.		☐ YE	s 🛛	NO
128.	WILL THE	ANTENNA IN	CREASE TH	E HEIGHT OF	THE EXISTING	STRU	JCTL	JRE?					☐ YE	s 🗆	NO FT
12C.	NAME OF	CURRENT LI	CENSEE USI	NG STRUCTU	RE:		49	SB :		FOR COMMI	SSION U	SE ONLY			
12D.	CURREN	T LICENSEE'S	RADIO SERV	VICE:											
12E.	CURREN	T LICENSEE'S	CALL SIGN:								, . <u></u>				
13.	THE ENT	TRE ANTENNA	A (OR POLE)	S) MOUNTED (INCLUDING A	LL ANTENNA	S. DISH	HES.	LIGHTNING	RO	DS. OBSTRU	CTION L	IGHTING,			FT
14.	FOR ANT		NTENNA TO	WERS (OR POL									WATER		
14A	ELEVATO	OR SHAFTS, PI	ENTHOUSES	BOVE GROUNE S. LIGHTNING	RODS, LIGHTS	S. ETC.	. Wh	ICH ARE NOT	T P	ART OF THE	ANTENI	NA TOWER		423	FI
148	ETC.) IN	CREASE THE	HEIGHT OF T	NNA TOWER (THE SUPPORTI HEIGHT OF TH	ING STRUCTU	JRE IN	ITE	M 14A? IF THI	S	INTENNA O	RANTEN	INA TOWER	(OR	9	F
14C				F THIS SUPPO										432	F
15.	GIVE TH	E GROUND EL	EVATION A	BOVE MEAN SE			_							30	F
16A	NAME O	F NEAREST A Guardía	RCRAFT LAI	NDING AREA:		168.	DIR 4	ECTION AND . 2 miles	DI	STANCE TO	NEARES 6 Ea	TRUNWAY		· —-	

7.4	Has notice of construction been filed with the FAA on FAA Fo	orm 7460-1? If yes.	answer	tems 178	, C, and D.		YES DE NO
		17C. FAA REGIONA				17D. DA	
•							
3.	Would a Commission grant of your application be an action	which may have a	☐ YES		is is an existing	station, enter	the year it wa
	significant environmental effect as defined by Section 1.130 sion's Rules? See Instruction 18. If you answer yes, submit to)7 of the Commis-		first	licensed:		
	required by Sections 1.1308 and 1.1311.	The state of the s	₩ NO		199	92	
		-TECHNICAL INFO		N Coo	Attached		
	NAME OF ITEM	A	T	8	C	D .	E
0.	Frequency (MHz) 18145.0 -18577.0						
l .	Bandwidth (kHz) and Emission Type						
2.	Type of Message Service						
3.	Initial Baseband Channel Loading						
4.	10 yr. Projected Baseband Channel Loading				<u> </u>		
		MITTER INFORMAT	TION				
	NAME OF ITEM	A		8	C	D	Ε
<u>. </u>	Transmitter Operating Frequency Tolerance (%) Antenna Gain (dBi)						
6. 7.	Effective Isotropic Radiated Power (dBm)				 		
<u>. </u>	Beamwidth (Degrees)				 		
9.	Height to Center of Final Radiating Element (Ft)		+-		 		
0.	Polarization				1		
1	Azimuth to Receive Site or Passive Repeater (PR) No. 1 (Dec	grees)	\top				t
	RECE	IVE SITE INFORMAT	TION				<u> </u>
	NAME OF ITEM	A		В	C	D	Ε
2.	Receiving Station's Call Sign						
3.	Receiving Antenna Gain (dBi)						
4.	Median Received Signal Level at Input to the Receiver (dBm	n)					
5.	Latitude N (Degrees, Minutes, Seconds)						
6.	Longitude W (Degrees, Minutes, Seconds)						
7.	Ground Elevation AMSL (Ft)				<u> </u>		
8	Height to Center of Receiving Antenna (Ft)				<u> </u>		<u> </u>
		TER NO. 1 INFORM			See Att		
	If you have two or more passive repeaters on the same tran FCC Form 402 or a separate sheet of paper for the second a				swer items 39-4	on an additi	onai
	NAME OF ITEM	A		В	С	D	E
9	Latitude N (Degrees, Minutes, Seconds)						<u> </u>
0	Longitude W (Degrees, Minutes, Seconds)						
1	Ground Elevation AMSL (Ft)				1		<u> </u>
2	Overall Height of PR Structure Above Ground (Ft)						<u> </u>
3	Dimensions (Ft X Ft) or Beamwidth (for dishes) (Degrees)						
4	Height Above Ground to Center of PR (Ft)						
15	Polarization				 		
6	Azimuth to Receive Site or Next PR (Degrees)	704 N/ 022222	7100:		<u> </u>		
2 / 3 / 4 / 5 /	Applicant certifies that a copy of CFR 47, Part 94 has been re Applicant waives any claim to the use of any particular frequing Applicant will have unlimited access to the radio equipment. Neither applicant nor any member thereof is a foreign govern Applicant will utilize type accepted radio equipment and anti- Applicant certifies that all statements made in this application.	ency regardless of p and will control acc nment or representa enna of correct spe	e. orior use less and ative the cification	exclude u reof. ns.	inauthorized per		
ا ر	Applicant Certifies that all statements made in this application WILLFUL FALSE STATEMENTS MADE ON THIS FORM OR ATTACH					TITLE 18 SECTION	1001
ΥP	ED NAME:	INCH IS ARE FURGINABL	TITLE			******	
	Behrooz Nouram		1		r of Engin	eering	
SIG	NATURE of individual, partner, official of a governmental ent	tity officer or autho				DATE:	
	officer who is also a member of the association.	- Dan		1010/00 0	e corporation,	5/19	/93
app app	NOTICE TO INDIVIDUALS REQUIRED BY PRINTED BY	, as wh ended, (licen ur eligibility for a lic inforenforcement an	sing pov cense. T id rule-m	rers) auth he inform laking pro	orize the FCC to ation will be use ceedings and to	request the infection and by FCC state maintain a cui	formation on If to evaluate rrent inventor

FCC 402

FCC FORM 402 ENGINEERING DATA

SECTION III-TECHNICAL INFORMATION

TRANSMITTER SITE NAME:	420	JEZ	AST 54T,	NΥ
TRANSMITTER COORDINATES :	40	45	20.0 N	
	73	57	52.0 W	

20.	FREQUENCY	(MHZ):	SEE	EXHIBIT
21.	EMISSION:		SEE	EXHIBIT
~ ~	MUDE OF ME	COLOR CERUTOR.	UTOI	70

VIDEO

22. TYPE OF MESSAGE SERVICE:
23. INITIAL BASEBAND CHANNEL LOADING: 1 24. 10 YR PROJ. BASEBAND CHANNEL LOAD: 1

TRANSMITTER INFORMATION

25.	OPERATING FREQ. TOL(%):	0.000500
26.	ANTENNA GAIN (DBI):	44.7
27.	EFFECTIVE RADIATED POWER (DBM):	24.7
28.	BEAM WIDTH (DEGREES):	0.9
29.	CENTER OF RADIATING ELEMENT (FT):	405.0
30.	POLARIZATION:	V
31.	AZIMUTH TO NEXT STATION OR PR1(DEG)	:270.011

RECEIVER INFORMATION

RECEIVER SITE NAME: 333 E 55TH , NY

32. CALL SIGN:

33. RECEIVING ANTENNA GAIN (DBI): 48.2
34. MEDIAN RECEIVED SIGNAL LEVEL (DBM): -40.9

35. LATITUDE N. (DD MM SS): 36. LONGITUDE W. (DDD MM SS): 40 45 27.5 73 57 54.5

37. GROUND ELEVATION AMSL (FT): 48.0 38. HT. TO RECEIVING ANTENNA (FT):

SUPPLEMENTAL INFORMATION

TRANSMITTER INFORMATION

CABLEWAVE SYSTEMS TRANSMITTER ANTENNA MAKE: TRANSMITTER ANTENNA MODEL: PA4-190 EQUIPMENT MAKE: HUGHES AIRCRAFT CO EQUIPMENT MODEL: DO063QAMLMOT18120

RECEIVER INFORMATION

RECEIVING ANTENNA MAKE: CABLEWAVE SYSTEMS RECEIVING ANTENNA MODEL: PA6-190

FCC FORM 402 ENGINEERING DATA

PASSIVE REPEATER INFORMATION

345 PASSIVE --> 333 E 55TH ST, NY

39.	LATITUDE N. (DD MM SS):	40 45 20.0
40.	LONGITUDE W. (DDD MM SS):	73 57 59 ₆ 0
	GROUND ELEVATION AMSL (FT):	32
42.	HT. OF PR 1 STRUCTURE (FT):	165.0
43.	DIM. (FT X FT) OR BEAMWIDTH (DEG):	0.650
44.	HT. TO CENTER OF PR 1 (FT):	160.0
45.	POLARIZATION:	V
46.	AZIMUTH-PR 1 TO NEXT STATION (DEG):	24.525

EXHIBIT #1

FREQUENCY	EMISSION DESIGNATOR
18145.0	5750A5C/250F3
18151.0	5750A5C/250F3
18157.0	5750A5C/250F3
18163.0	100A0
18169.0	5750A5C/250F3
18175.0	5750A5C/250F3
18181.0	5750A5C/250F3
18187.0	5750A5C/250F3
18193.0	5750A5C/250F3
18199.0	5750A5C/250F3
18205.0	5750A5C/250F3
18211.0	5750A5C/250F3
18217.0	5750A5C/250F3
18223.0	5750A5C/250F3
18229.0	5750A5C/250F3
18235.0	5750A5C/250F3
18241.0	5750A5C/250F3
18247.0	5750A5C/250F3
18253.0	5750A5C/250F3
18259.0	5750A5C/250F3
18265.0	5750A5C/250F3
18271.0	5750A5C/250F3
18277.0	5750A5C/250F3
18283.0	5750A5C/250F3
18289.0	5750A5C/250F3
18295.0	5750A5C/250F3
18301.0	5750A5C/250F3
18307.0	5750A5C/250F3
18313.0	5750A5C/250F3
18319.0	5750A5C/250F3
18325.0	5750A5C/250F3
18331.0	5750A5C/250F3
18337.0	5750A5C/250F3
18343.0	5750A5C/250F3
18349.0	5750A5C/250F3
18355.0	5750A5C/250F3
18361.0	5750A5C/250F3
18367.0	5750A5C/250F3
18373.0 _	5750A5C/250F3
18379.0	5750A5C/250F3
18385.0	5750A5C/250F3
18391.0	5750A5C/250F3
18397.0	5750A5C/250F3
18403.0	5750A5C/250F3
18409.0	5750 A5 C/250F3
18415.0	5750A5C/250F3
18421.0	5750A5C/250F3
18427.0	5750A5C/250F3
18433.0	5750A5C/250F3
18439.0	5750A5C/250F3
18445.0	5750A5C/250F3
	•

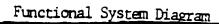
EXHIBIT #1 CONTINUED

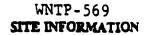
FREQUENCY	EMISSION DESIGNATOR
18451.0	5750A5C/250F3
18457.0	5750A5C/250F3
18463.0	5750A5C/250F3
18469.0	5750A5C/250F3
18475.0	5750A5C/250F3
18481.0	5750A5C/250F3
18487.0	5750A5C/250F3
18493.0	5750A5C/250F3
18499.0	5750A5C/250F3
18505.0	5750A5C/250F3
18511.0	5750A5C/250F3
18517.0	5750A5C/250F3
18523.0	5750A5C/250F3
18529.0	5750A5C/250F3
18535.0	5750A5C/250F3
18541.0	5750A5C/250F3
18547.0	5750A5C/250F3
18553.0	5750A5C/250F3
18559.0	5750A5C/250F3
18565.0	5750A5C/250F3
18571.0	5750A5C/250F3
18577.0	5750A5C/250F3

STATEMENT OF ELIGIBILITY AND USE

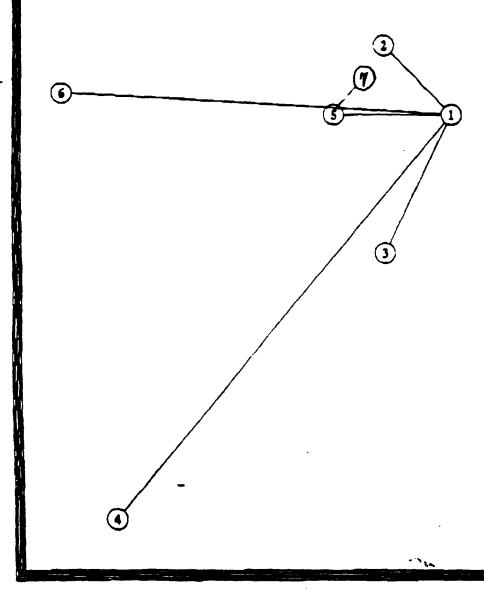
Applicant is engaged in the operation of a commercial activity as a provider of video entertainment programming to customers. Therefore, Applicant is eligible for operational-fixed microwave frequencies under section 90.75(a)(1) of the Commission's rules.

Applicant proposes to distribute its own products and services to customers using operational-fixed frequencies in the band 18,142-18,580 MHz. Pursuant to section 94.31(j) of the Commission's rules, the nature of the products and services to be distributed are described below. Applicant is the owner and operator of various private cable (SMATV) systems and proposes the point-to-point distribution of video entertainment material to private cable buildings and ultimately subscribers to the service. Section 94.9(a)(1) of the Commission's rules prohibits the distribution of video entertainment material to customers on frequencies below 21,200 MHz except as provided in Section 94.61(b) and Section 94.9(a)(2). Section 94.9(a)(2) authorizes a licensee to transmit any of its own products or services, including video entertainment programming, to any receiving location on frequencies in the 18,142-18,580 MHz band. Applicant's proposed use of the 18,142-18,580 MHz band frequencies is consistent with the Commission's rules.





- 1 River Tower, NY LAT: 40 - 45 - 20.0 LONG: 73 - 57 - 52.0
- 25 Sutton Place, NY-LAT: 40 - 45 - 23.0 LONG: 73 - 57 - 56.0
- 3 420 E. 51st ST.,NY LAT: 40 - 45 - 14.0 LONG: 73 - 57 - 56.0
- 4 U.N. Plaza, NY LAT: 40 - 45 - 2.5 LONG: 73 - 58 - 12.0
- (5) 345 E. 52nd ST.,NY LAT: 40 - 45 - 20.0 LONG: 73 - 57 - 59.0
- 6 201 E. 50th, NY LAT: 40 - 45 - 21.0 LONG: 73 - 58 - 15.0
- 333 E. 55th LAT: 40-45-27.5 LONG: 73-57-54.5



Liberty Cable Television
18 GHZ Video Microwave System



PAGE: 1 OF

COMSEARCH 11720 Sunrise Valley Drive Reston, Virginia 22091 (703) 620-6300

LIBERTY CABLE CO., INC.

04/12/93

MICROWAVE PATH DATA

	MICKOWAVE PAIN DAIR	
STATION NAME PATH STATUS CALL SIGN LATITUDE (D-M-S) LONGITUDE (D-M-S) GROUND ELEV (FT-AMSL PATH AZIMUTH (DEG) PATH DISTANCE (MILES) (KM)	420 EAST 54TH NY PROPOSED OR PRIOR COORDIN. WNTP569 40 45 20.0 73 57 52.0 30 270.011 0.102 0.164	345 PASSIVE NY ATED 40 45 20.0 73 57 59.0 32 90.010
ANTENNA PRIMARY FCC CODE GAIN (dBi) C/L (FT-AGL)	CABLEWAVE SYSTEMS PA4-190 CB0082 44.7 405	NOT APPLICABLE
PRIMARY RX FCC CODE GAIN (dBi) C/L (FT-AGL) DIVERSITY FCC CODE GAIN (dBi) C/L (FT-AGL)	NOT APPLICABLE	CABLEWAVE SYSTEMS PA6-190 CB0093 48.2 160
EQUIPMENT FCC CODE EMISSION LOADING STABILITY (%) POWER (DBM) RECEIVED LEVEL (DBM)	HUGHES AIRCRAFT CO DOO63QAMLMOT18120 PENDING 5M75C3F/250F3/100A0 VIDEO 0.000500 -10.0	PASSIVE REPEATER
EIRP (DBM) FIXED LOSSES (DB) FREE SPACE LOSS (DB)		1.0
FREQUENCIES 18187.0V (MHZ) 18229.0V 18271.0V 18313.0V 18355.0V	7,18151.0V,18157.0V,18163.0V,1816 7,18193.0V,18199.0V,18205.0V,182 7,18235.0V,18241.0V,18247.0V,182 7,18277.0V,18283.0V,18289.0V,182 7,18319.0V,18325.0V,18331.0V,183 7,18361.0V,18367.0V,18373.0V,183 7,18403.0V,18409.0V,18415.0V,184	11.0V,18217.0V,18223.0V 53.0V,18259.0V,18265.0V 95.0V,18301.0V,18307.0V 37.0V,18343.0V,18349.0V 79.0V,18385.0V,18391.0V

18565.0V, 18571.0V, 18577.0V

18397.0V, 18403.0V, 18409.0V, 18415.0V, 18421.0V, 18427.0V, 18433.0V 18439.0V, 18445.0V, 18451.0V, 18457.0V, 18463.0V, 18469.0V, 18475.0V 18481.0V, 18487.0V, 18493.0V, 18499.0V, 18505.0V, 18511.0V, 18517.0V 18523.0V, 18529.0V, 18535.0V, 18541.0V, 18547.0V, 18553.0V, 18559.0V

PAGE: 2 OF

COMSEARCH

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11720 Sunrise Valley Drive Reston, Virginia 22091 (703) 620-6300

LIBERTY CABLE CO., INC.

04/12/93

MICROWAVE PATH DATA

STATION NAME PATH STATUS CALL SIGN	345 PASSIVE NY PROPOSED OR	333 E 55TH NY PRIOR COORDINATED	
LATITUDE (D-M-S)	73 57 59.0	40 45 27.5 73 57 54.5 48	
PATH AZIMUTH (DEG) PATH DISTANCE (MILES) (KM)	24.525	204.526 0.158 0.254	
ANTENNA PRIMARY TX FCC CODE	CABLEWAVE SYSTEMS PA6-190 CB0093	NOT APPLICABLE	
GAIN (dBi) C/L (FT-AGL) PRIMARY RX	48.2 160 NOT APPLICABLE	CABLEWAVE SYSTEMS	
FCC CODE GAIN (dBi) C/L (FT-AGL) DIVERSITY FCC CODE GAIN (dBi) C/L (FT-AGL)		PA6-190 CB0093 48.2 132	
EQUIPMENT FCC CODE EMISSION LOADING STABILITY (%) POWER (DBM)	PASSIVE REPEATER	RECEIVE ONLY	
RECEIVED LEVEL (DBM)		-40.9	
EIRP (DBM) FIXED LOSSES (DB) FREE SPACE LOSS (DB)	16.9 1.0 106	0.0	
FREQUENCIES 18187.0V (MHZ) 18229.0V 18271.0V	7,18193.0V,18199.0V 7,18235.0V,18241.0V 7,18277.0V,18283.0V	7,18163.0V,18169.0V,18175.0V,1818 7,18205.0V,18211.0V,18217.0V,1822 7,18247.0V,18253.0V,18259.0V,1826 7,18289.0V,18295.0V,18301.0V,1830	3.0V 5.0V 7.0V

18565.0V, 18571.0V, 18577.0V

18313.0V,18319.0V,18325.0V,18331.0V,18337.0V,18343.0V,18349.0V 18355.0V,18361.0V,18367.0V,18373.0V,18379.0V,18385.0V,18391.0V 18397.0V,18403.0V,18409.0V,18415.0V,18421.0V,18427.0V,18433.0V 18439.0V,18445.0V,18451.0V,18457.0V,18463.0V,18469.0V,18475.0V 18481.0V,18487.0V,18493.0V,18499.0V,18505.0V,18511.0V,18517.0V 18523.0V,18529.0V,18535.0V,18541.0V,18547.0V,18553.0V,18559.0V

FREQUENCY COORDINATION

Pursuant to section 94.15(b) of the FCC's rules, Applicant has conducted a frequency engineering analysis of the potential interference between the proposed facilities and previously authorized and pending applications. Attached hereto are the Supplemental Showings of Comsearch certifying compliance with the interference standards of sections 21.100(d) and 94.63 of the FCC's rules.



APRIL 12, 1993

*** CLIENT COPY ***
*** PLEASE MAIL ***
*** TO CUSTOMER ***

RE: Liberty Cable Co., Inc.
215 East 95th Street, New York, NY 10128
18 GHz Video Microwave System
Receive Antenna Change (page 4 of 4)
Previous PCN Dated 04/01/93
205 East 64th -> 155 East 73rd, NY
Changes Have Been Underlined
205 East 64th -> Imperial House, NY
420 East 54th -> Passive -> 333 E 55th, NY

Dear Sir or Madam:

On behalf of Liberty Cable Co., Inc., we are forwarding the attached coordination data for the proposed microwave paths referenced above, pursuant to Parts 21.100(d) and 94.15(a) of the FCC Rules.

Please examine this data for potential interference with your stations. In the event that interference problems are discovered, please notify us at your earliest convenience. If a response is not received within thirty days of 04/15/93, we will assume that you have no objections to this proposal.

If you have any questions or require additional information, please call me.

Sincerely,

Michael R. Roth

muhal R.Rost

Engineer

Transmission Planning Services

Enclosure



Liberty Cable Co., Inc.

215 East 95th Street, New York, NY 10128

18 GHz Video Microwave System

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PURSUANT TO PART 21.100(D) OF THE FCC RULES AND REGULATIONS THE ABOVE REFERENCED MICROWAVE ROUTE WAS COORDINATED WITH THE EXISTING LICENSEES AND APPLICANTS WHOSE FACILITIES COULD BE AFFECTED. COORDINATION DATA WAS FORWARDED ON APRIL 12, 1993.

THE FOLLOWING CARRIERS OR THEIR DESIGNATED COORDINATION AGENTS WERE NOTIFIED:

AAD MICROWAVE SERVICES CORPORATION AAT COMMUNICATIONS CORPORATION ABC RADIO NETWORK INC ABRAHAM AND STRAUS ACC NETWORK CORPORATION AETNA LIFE INSURANCE COMPANY ALBANY TELEPHONE COMPANY ALLENTOWN CELLULAR TELEPHONE COMPANY AME ICAN CELL, NET, CORP, dba COMCAST CE AMERICAN SATELLITE COMPANY AMICA MUTUAL INSURANCE CO C/O NEW ENG DI ASSOCIATED PRESS - CTS ENGINEERING AT&T COMMUNICATIONS BELL ATLANTIC - NSS BELL COMMUNICATIONS RESEARCH, INC. BLUE CROSS BLUE SHIELD OF MASSACHUSETTS BOLT BERANEK AND NEWMAN INC BOSTON EDISON COMPANY CABLE SCIENCE CORPORATION CANTON CELLULAR TELEPHONE - PENNSYLVANIA CARL COMPANY CELLULAR OF UPSTATE NEW YORK



Liberty Cable Co., Inc.

215 East 95th Street, New York, NY 10128

18 GHz Video Microwave System

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(CONT'D)

CELLULAR TELEPHONE COMPANY OF NEW YORK CHANNEL 13 TELEVISION CHANNEL 20 LICENSEE INC CHASE MANHATTAN BANK CITY UNIVERSITY OF NEW YORK COLUMBIA UNIVERSITY COMDISCO DISASTER RECOVERY SERVICE COMMUNITY HOME ENTERTAINMENT COMPUGRAPHIC COMSEARCH CONNECTICUT BANK AND TRUST COMPANY CONNECTICUT LIGHT AND POWER COMPANY CONNECTICUT PUBLIC BROADCASTING, INC. CONSOLIDATED EDISON COMPANY OF NEW YORK CONSOLIDATED RAIL CORPORATION CONSOLIDATED SPECTRUM SERVICES CORP. SATELLITE COMMUNICATIONS INC (CSC) DEAD COMPANY DELMARVA POWER & LIGHT CO. DIGICOM INC DOW JONES AND COMPANY, INC. EBASCO SERVICES, INC. EDUCATIONAL BROADCASTING COMPANY EDWARDS AND KELCEY INC



Liberty Cable Co., Inc.

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EMI COMMUNICATIONS CORPORATION FAIRCHILD COMM NETWORK MNGMT CO FIRST BOSTON CORPORATION FIRST NATIONAL BANK OF BOSTON FIRST NATIONAL BANK OF MARYLAND FRANKLIN COUNTY OF GREENWICH POLICE DEPARTMENT GROUP W TELEVISION / WJZ TV GRUMMAN AEROSPACE CORPORATION HARRISBURG CELLULAR TELEPHONE COMPANY HUDSON VALLEY COMMUNITY COLLEGE IBM RESEARCH AND DEVELOPMENT, INC. INTERACTIVE MEDIA SERVICES LAUREL RACETRACK LAWRENCE SCHOOL DISTRICT LEVER BROTHERS LIZ CLAIBORNE, INC. LOCAL AREA TELECOMMUNICATIONS INC LONG ISLAND RAILROAD COMMUNICATIONS DEP MALRITE MARYLAND STATE OF MASS TRANSIT ADMIN MCGRAW HILL, INC. NET ENG N-1 MCI TELECOMMUNICATIONS CORPORATION MEDICAL COLLEGE OF PENNSYLVANIA METRO CABLE SYSTEMS, INC.



Liberty Cable Co., Inc.

215 East 95th Street, New York, NY 10128

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(CONT'D)

METRO MOBILE CTS OF FAIRFIELD COUNTY METROMEDIA COMMUNICATIONS CORPORATION METRONET COMMUNICATIONS METRONET INC RADIO PAGING MICRO TEL OF LONG ISLAND, INC. MICROBAND CORPORATION OF AMERICA MICROBAND WIRELESS CABLE OF NEW YORK, IN MICRONET COMMUNICATIONS, INC. MICRONET, INC. MICROWAVE PLANNING, INC. MICROWAVE SATELLITE TECH. - WOODSIDE MIDLAND COMMUNICATIONS CORPORATION MORGAN STANLEY MOTOROLA C & E, INC NASSAU, COUNTY OF POLICE DEPARTMENT NATIONAL WESTMINSTER BANK NBC SUBSIDIARY (WNBC-TV, INC.) NEW ENGLAND DIGITAL DISTRIBUTION, INC. NEW ENGLAND MICROWAVE INC (STORER) NEW ENGLAND TELEPHONE COMPANY NEW JERSEY BELL TELEPHONE COMPANY NEW JERSEY INTERCAMPUS NETWORK, INC. NEW JERSEY PUBLIC BROADCASTING AUTHORITY NEW YORK STATE OF OFFICE GENERAL SRVCS



Liberty Cable Co., Inc.

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(CONT'D)

NEW YORK CELLULAR GEOGRAPHIC SRVC AREA NEW YORK CGSA FOR ALBANY NEW YORK CITY HEALTH & HOSPITAL CORP NEW YORK CITY POLICE DEPARTMENT NEW YORK STATE ASSEMBLY NEW YORK STATE ELECTRIC AND GAS NEW YORK STATE HOSPITAL NEW YORK TELEPHONE NEW YORK UNIVERSITY, TELECOM. DEP'T. NEW YORK, CITY OF BOARD OF EDUCATION NORTHEASTERN PENNSYLVANIA CELLULAR TEL NORTHFIELD MT HERMON SCHOOL ORANGE COUNTY CELLULAR TELEPHONE CORP. OTSEGO COUNTY, NEW YORK PAINE-WEBBER PHOENIX COMMUNICATIONS, INC. PORT AUTHORITY OF NEW YORK & NEW JERSEY PROVIDENCE JOURNAL PRUDENTIAL BACHE SECURITIES INC PUTNAM COMPANIES RANA INC RCI NETWORK SERVICES ROBERT PLAN INSURANCE CORPORATION SAINT JOSEPH HOSPITAL SANDERS ASSOCIATES



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(CONT'D)

SCHENECTADY COUNTY, NEW YORK/LAW ENFORCE SCRIPPS HOWARD BROADCASTING CO. INC SOUTHEASTERN PENNSYLVANIA AUTHORITY SOUTHERN NEW ENGLAND TELEPHONE CO SOUTHWESTERN BELL MOBILE SYSTEMS - MA SPEAR LEEDS AND KELLOGG INC SPENCER GIFTS STATE STREET BANK AND TRUST COMPANY STATE UNIVERSITY OF NEW YORK SUBURBAN CABLE TV CO INC SUPERIOR CABLE TV SUSQUEHANNA CELLULAR COMM LTD PARTNERSHI TELEMARK NETWORKS, INC TELEMEDIA COMMUNICATIONS, INC THE BOEING COMPANY TUFTS UNIVERSITY URBAN CABLESYSTEMS CORPORATION WATCH TOWER BIBLE & TRACT SOCITY OF NY WATERFRONT COMMUNICATIONS CORPORATION MCAU-TV WELCH ALLYN INC WEST CORP COMMUNICATIONS, INC. WEST JERSEY HEALTH SYSTEM WESTCHESTER, COUNTY OF WHYY, INC.